

# PSYCHIATRIC ASSESSMENT OF THE DANGEROUSNESS OF MENTALLY ILL OFFENDERS

Vernon L. Quinsey  
Rudolph Ambtman

Among the most important and controversial tasks of mental health professionals working in maximum security psychiatric institutions is deciding which patients are safe enough to be released or transferred to less secure settings. Although the assessment of patient dangerousness has profound effects on the lives of those being assessed, these determinations are known to be difficult to perform accurately (Quinsey, Ambtman, & Pruesse)<sup>1</sup>.

In Ontario, a person who has been found unfit for trial or not guilty by reason of insanity for a criminal offense is detained on an indeterminate Warrant of the Lieutenant Governor (WLG). WLGs are considered for release or transfer annually by the Advisory Review Board, which is administratively independent of the hospital and makes recommendations to the Provincial Cabinet. The characteristics of WLGs have been described in a cross Canada survey by Quinsey and Boyd (1977) and for the maximum security Oak Ridge Division of the Penetanguishene Mental Health Centre by Arnold, Quinsey, and Velner, (1977).

The authors: . Vernon L. Quinsey, Ph. D., Director of Research and Rudolph Ambtman, Mental Health Centre, Penetanguishene, Ontario.

Acknowledgement: The authors wish to thank Manuel Helzel, Marnie Rice, Manfred Pruesse and Larry Arnold for their comments on an earlier draft of this paper and the clinicians who rated the patients. Special thanks to Mrs. P. Buck for collecting data at the conferences and providing her notes.

<sup>1</sup> Quinsey, V. L., Ambtman, R., & Pruesse, M. Institutional release policy and the identification of dangerous men. Paper presented at the Symposium on Violence in Canadian Society, Qualicum Beach, Vancouver Island, B. C., March, 1977.

Assessments of the dangerousness of WLGs are particularly difficult because many of them have committed a single serious crime against persons as an isolated event in their lives. The social cost of a repetition of the offense is, therefore, very high although its probability is very low (Quinsey, Ambtman, & Pruesse). Attempts to predict such rare events from imperfect predictive data inevitably generate too many predictions that the event will occur (false positives) because of statistical constraints on the predictions (Kahneman & Tversky, 1973).

Follow-up studies of WLGs released from Oak Ridge (Pruesse & Quinsey in press; Quinsey, Pruesse, & Fernley, 1975a) have found that very few WLGs commit dangerous post-release offenses. These data can be interpreted to mean that the release decisions are very accurate or that they are merely conservative. The evidence from the research literature on the prediction of dangerousness supports the latter alternative (Quinsey, Ambtman, & Pruesse).

There have been very few studies which have examined what factors psychiatrists actually use in making an assessment of a person's dangerousness. Steadman and Cocozza (1973) have pointed out that the "dynamics of decision-making leading to the release of the criminally insane to the community are almost entirely undocumented". Most studies of such psychiatric decision making are impressionistic rather than quantitative (e.g. Dix, 1975; Sturup, 1968). This dearth of quantitative data is unfortunate in view of the importance of the decisions to which they pertain. Such data could be used in follow-up studies designed to improve psychiatric decision making by

86  
112.

empirically relating psychiatric decision data to outcome information.

Quinsey (1975) studied 39 consecutive conferences of men remanded by the courts to Oak Ridge for examination. There were differences among attendants, physicians and other professional staff in the degree to which the remands were seen as mentally ill, treatable, and dangerous. There was a positive relationship between rated degree of mental illness and dangerousness ratings. This study, however, provided limited information about the implicit model which psychiatrists use in predicting whether a person will be dangerous on release for two reasons: (a) the assessments were done on men who were to be returned to the courts rather than released and (b) the personnel at patient conferences varied over the conferences, necessitating a pooling of data within occupational groups.

The purpose of the present study was twofold: first to relate the recommendations of an interdisciplinary hospital committee to the Advisory Board regarding male WLGS and the WLGS' characteristics and, secondly, to examine the relation of patient characteristics to the dangerousness ratings of these patients made by individual clinicians.

#### STUDY 1

The first study related historical, demographic and clinical characteristics of the WLGS being conferenced to the hospital staff conference recommendation to the Advisory Board.

#### Method

One hundred and five WLGS held in Oak Ridge were conferenced in May and June of 1975 by a multidisciplinary team comprised of psychiatrists, social workers, attendants, nursing, psychology staff and others (the team was similar to that described by Quinsey, 1975). In each case, the recommendation of the conference was recorded. Alternative recommendations were: (a) to keep the patient in maximum security, (b) transfer him to a less secure setting, (c) send him to court (in cases where the WLGS was unfit for trial) or (d)

a mixed recommendation which fit in none of the above categories, and reflected disagreement among the team members or the special nature of an individual case.

Thirty-three background variables were obtained from the clinical files of each patient. These variables included the patient's age, diagnosis, length of stay, personal history, family background, and progress within Oak Ridge.

The severity of the offense(s) leading to admission was measured using Akman and Normandeau's (1967) method. In this method, each offense element (e.g. amount of money taken, number of persons injured) is weighted by a number proportional to the severity of the element (as determined by the judges' ratings in Akman and Normandeau's study) and multiplied by the number of such elements present. The severity score is the sum of all the weighted elements involved in the offense(s). For example, each person killed is weighted by 28, an amount of property under \$50.00 destroyed or stolen receives a weight of 1, and an amount of property over \$200,000.00 destroyed or stolen receives a weight of 13. In the present study, two independent raters rated the severity of each WLGS's offense and their ratings were averaged for the purposes of further analysis. The Pearson inter-rater correlation was very high ( $r = .94$ ). It was also determined from the offense description whether there was unambiguous premeditation — that is, whether the offense was obviously planned beforehand. Two independent raters scored 30 randomly chosen cases and agreed on 87% as to whether premeditation was present.

The number of positive and negative progress notes in the 4 month period preceding the conference were tabulated. Positive notes were those indicating that the patient was improved and negative notes were those indicating disciplinary actions or the presence of, or an increase in, psychiatric symptoms. Two raters rated the files independently and their ratings were averaged for further analysis. The Pearson interrater correlation was .88 for the number of positive notes and .95 for the number of negative notes (hereafter referred to as "negative comments 1"). Similar data

were gathered for the 4 month period ending 1 year before the conference ("positive comments 2" and "negative comments 2").

All variables were dichotomized and it was determined with a Yates Chi Square (cs) whether each variable significantly discriminated WLGs who were recommended for transfer from those who were not. The patients for whom mixed recommendations were given were deleted from these analyses.

## Results

### *Description of the WLG Patients*

The 105 WLGs averaged 33.53 years of age (SD = 10.30) at the time of conference and had been in Oak Ridge an average of 41.77 months (SD = 45.19). Their mean number of completed grades was 8.84 (SD = 2.71) and only 8% had received any formal education beyond high school. Sixty-eight percent were reported as neither having been married nor having lived common-law. Fifty-four percent received primary diagnoses as psychotic and 40% as personality disordered (including sexual deviation). Fifty-nine percent had never been admitted to a federal or provincial correctional institution (excluding county jails but including training schools) and 50% had no previous admissions to a mental hospital (excluding previous admissions to Oak Ridge). Ninety-one percent had no previous admission to Oak Ridge (excluding previous admissions for the current offense).

In terms of the offense leading to the current admission, 53% of the WLGs had killed at least one person and 10% had committed only a property offense (damage or theft). The mean seriousness ratings of the offenses for the entire groups was 26.22 (SD = 18.17).

### *Conference Recommendations in Relation to Background Variables*

The conference team recommended retaining 64 patients, transferring 30, and gave other or mixed advice for 11. WLGs who had been unfit for trial and were being returned to court were included in the latter category. Patients were more likely to receive recommendations for release if they

had shown unambiguous premeditation in their offense (cs = 5.47,  $p < .02$ ), had received four or fewer negative progress notes in the preceding 4 month period (cs = 5.30,  $p < .02$ ) and if they were not receiving psychotropic medication at the time of the conference (cs = 5.18,  $p < .025$ ). There were also trends (all  $p$ 's  $< .10$ ) for patients to receive release recommendations if they had received four or fewer negative progress notes during the 4 month period beginning 16 months prior to the conference (negative comments 2), had offense severity ratings of 20 or less, and if they had had one or no previous admissions to correctional facilities (excluding county jails).

The final decisions as reflected by the Orders in Council (decisions of the Provincial Cabinet signed by the Lieutenant Governor) substantially agreed with the hospital team's recommendations. These decisions were available for 93 of the 94 patients for whom unambiguous recommendations were made by the hospital regarding retention or transfer (one patient had died). The Cabinet decided to transfer eight patients whom the hospital conference team had recommended keeping and to retain eight for whom the hospital team had advised transfers. The recommendations of the hospital and the final decisions were thus highly congruent (cs = 30.65,  $p < .001$ ).

## Discussion

It was of interest that the number of negative progress notes were related to the conference decisions but the number of positive notes were not. This asymmetry may be a result of the set of the conference team to avoid discharging patients who are likely to be violent — i.e. the event which they attempted to predict was a future violent (or negative) incident. If this were true, patients were assessed on the basis of dangerousness or bad behaviors rather than on the basis of safe or positive behaviors. It is, however, unclear as to what extent in-hospital adjustment is actually related to post-discharge functioning. Waller (1974), for example, found that men in a Canadian federal penitentiary who had committed offenses against guards were "not more likely to be re-arrested although if they were, it was often earlier. While such men pose

problems to the prison administration, they are not necessarily more violent or dangerous after release". On the other hand, Tong and MacKay (1959) in a British study of men released from a special security hospital found that patients who exhibited various forms of antisocial behavior in hospital were more likely to commit new offenses and/or be readmitted to the security hospital than those who had not. In the present study, because WLGs are almost invariably transferred from the security hospital to regional psychiatric centres, the relationship between their in-hospital symptomatology and behavior to outcome may well be greater than that found in follow-up studies of other populations because of the similarity of the two hospital environments. This contention is almost impossible to prove, however, since patients with frequent negative progress reports are very seldom transferred.

The finding that patients who had obviously premeditated their offenses were more likely to be discharged is rather puzzling. It may be that premeditated offenses are seen as more understandable and, therefore, more predictable than more spontaneous offenses. It is improbable that premeditated offenses were less serious than unpremeditated offenses as there was no significant relationship between offense severity and conference decision.

The finding that patients who were receiving psychotropic medication were less likely to be recommended for discharge is perhaps the most straightforward to interpret. Presumably, medicated patients were in poorer psychiatric condition than those unmedicated; our earlier conference study indicated that clinicians perceive a positive relationship between mental illness and dangerousness.

Certain aspects of these data agree with those of Steadman and Cocozza (1973) who studied patients who had been transferred from a security hospital to an open hospital. The decision to release these patients to the community was unaffected by their previous criminal records, offense severity, or psychiatric diagnosis but was affected by the length of time they had been incarcerated, their behavior in the open hospital and the amount of community sup-

port they received. Our findings indicate that in-hospital behavior (negative progress notes and presence of medication) is related to release decisions and that severity of offense is not.

## STUDY 2

The purpose of the second study was to examine what background information was related to the assessments of the dangerousness of WLGs made by individual clinicians.

### Method

Four senior clinical staff who were present for many of the conferences agreed to fill out a rating sheet during or immediately after each conference they attended. Three of the staff were trained as psychiatrists: the Medical Director of the Centre and the Unit Directors of the two treatment units of Oak Ridge. The fourth rater was a psychologist from one of the units.

Each of the raters filled out one copy of the WLG Treatment Questionnaire, shown in Table 1, for each patient whose conference they attended.

Two points should be noted about the questionnaire: item 7 was deleted from the analysis if alternative *d* (other) was endorsed; item 5 was very similar to item 1 but was rated in the opposite direction. In the first analysis these ratings were intercorrelated separately for each of the 4 raters. In the second analysis an attempt was made to predict each rater's dangerousness rating (item 1) from 10 of the background variables employed in Study 1 using a stepwise regression method. Five of the six variables which were related to the conference decision at the .10 level of significance were included. The variable "negative comments 2" was deleted because the more strongly related "negative comments 1" variable was already part of the analysis. An additional 3 variables which were not significantly related to the conference decisions were included because they have been found to be related to recidivism in follow-up studies of released Oak Ridge patients (Quinsey, Pruesse, & Fernley, 1975b). These variables were: the patient's age at the time

TABLE 1  
WLG TREATMENT CONFERENCE  
QUESTIONNAIRE<sup>1</sup>

1. If released to the outside community at the present time, would the patient be physically dangerous to others?
2. If transferred to another institution at the present time, would the patient be able to adjust for at least one year without being returned to Oak Ridge?
3. Will this patient benefit from further treatment at Oak Ridge?
4. Is this patient certifiably mentally ill at the present time?
5. If released to the community at the present time, how likely is this man to commit an assaultive offense against another person within the next twelve months?
6. How confident are you about the above prediction?
7. In your opinion what advice should the conference give?
  - a. release to the street
  - b. transfer to another institution
  - c. retain in Oak Ridge
  - d. other, specify
8. Has this patient benefited from the treatment programs at Oak Ridge?
9. How well do you know this patient?

<sup>1</sup> Items 1 through 4 inclusive and items 8 and 9 were rated on 6-point scales from "definitely" to "definitely not". Items 5 and 6 were rated on 9-point scales: "certain not to" to "certain to" and "definitely not confident" to "definitely confident", respectively. Item 9 was rated on a 6-point scale from "extremely well" to "hardly at all".

of conference, the number of months in his current stay at Oak Ridge, and whether he was diagnosed as a personality disorder or sexual deviate or not. Two further variables (the number of previous admissions to Oak Ridge and the number of admissions to other psychiatric hospitals) were included to complete the description of the patients' prior institutionalization. In all the analyses of Study 2 naturally continuous variables were not dichotomized.

#### Results

##### *Intercorrelations Among the Ratings*

Raters one, two, three, and four rated 104, 104, 54, and 67 WLGs, respectively. As shown in Table 2, the pattern of correlations among the variables was fairly similar among the various raters. In general, items 1, 2, 3, 4, 5, and 7 were highly correlated. Patients who were seen to be

dangerous and likely to be assaultive were thought not to be able to adjust to another institutional setting, likely to benefit from further treatment, more mentally ill, and inappropriate for release to the street or transfer to another less secure setting. Although many of these correlations are obviously what would be expected — e.g. rating a patient as not likely to adjust in a less secure setting and dangerous and then rating him as inappropriate for transfer or release — several are not. For example, it is noteworthy that there was a strong positive relationship between perceived dangerousness and rated degree of mental illness, as well as a positive correlation between dangerousness and rated likelihood of benefiting from further treatment. It was also of interest that there were no significant correlations between offense severity as rated by the experimenters and any of the clinicians' ratings.

The four raters showed only a modest amount of inter-rater agreement in their dangerousness ratings of WLG patients. This rating was of primary interest as it was used as the dependent variable in the regression analysis. The N for these correlations were determined by the number of patients who were rated by the same raters. The mean dangerousness ratings for raters 1 through 4 respectively were 2.97 (SD = .80), 2.40 (1.50), 2.91 (.87) and 2.94 (1.01). The Pearson correlations between rater 1 and the remaining raters were .56, .49, and .66, respectively; between raters 2 and raters 3 and 4 were .61 and .67 and the correlation between raters 3 and 4 was .59. These inter-rater correlations are probably overestimates of the true amount of agreement, however, because, even though the clinicians rated the WLGs independently, they discussed the case at conference before, or at the same time that they made their ratings.

Dangerousness ratings, as expected, were related to conference recommendations as to whether a patient should be released or not. Yates chi squares were computed for each rater by dichotomizing each rater's dangerousness rating at his mean and relating this dichotomy to whether the recommendation was for transfer or retention. The chi squares were 9.25 (N = 93,

TABLE 2  
RANGE AND MEANS OF INTERCORRELATIONS AMONG RATINGS<sup>1</sup>

	1	2	3	4	5	6	7	8	9	10
1. Dangerous		-.772	.560	.663	-.778	.052	-.719	-.165	-.120	-.096
2. Will adjust	-.696									
	-.962		-.485	-.678	.761	-.016	.708	.227	.061	.013
3. Will benefit	.853	-.204		.599	-.513	.098	-.716	.069	-.110	-.007
	.309	-.840								
4. Mentally ill	.912	-.475	.897							
	.510	-.897	.300		-.621	.036	-.644	-.078	.002	.001
5. Will be assaultive	-.606	.939	-.252	-.412						
	-.935	-.593	-.847	-.847		.035	.691	.127	-.020	.074
6. Confidence <sup>2</sup>	.210	.156	.190	.178						
	-.114	-.204	-.044	-.083			.137	.061	-.269	-.035
7. Advice <sup>3</sup>	-.606	.873	-.542	-.472	.895	-.027				
	-.897	.608	-.899	-.914	.485	-.207		.132	.039	.113
8. Has benefitted	.058	.444	.387	.298	.294	.204	.369			
	-.410	.042	-.246	-.404	-.027	-.024	-.147		-.067	-.002
9. How well	.032	.276	.018	.178	.143	-.054	.150	.063		
	-.250	-.185	-.237	-.092	-.233	-.579	-.103	-.136		-.201
10. Seriousness <sup>4</sup>	-.026	.181	.023	.083	.152	.051	.275	.235	-.070	
	-.217	-.111	-.072	-.059	.020	-.238	.011	-.119	-.287	

<sup>1</sup> The averages were computed over the 4 raters, ignoring the differences in the total number of ratings per rater.

<sup>2</sup> The confidence rating was made only with reference to item 5.

<sup>3</sup> The advice variable was scored only if the rater did not endorse the "other" category. The N for this variable was 100, 100, 48, and 66 for raters 1 through 4, respectively.

<sup>4</sup> The seriousness variable is the Akman and Normandeau rating given by the experimenters.

$p < .01$ ), 57.51 ( $N = 93$ ,  $p < .001$ ), 10.38 ( $N = 49$ ,  $p < .01$ ) and 10.57 ( $N = 60$ ,  $p < .01$ ) for raters 1 through 4 respectively.

#### Intercorrelations Among the Predictive Variables

The 10 independent variables used in the stepwise regression analysis were intercorrelated over the 105 WLGs. There were 8 Pearson correlations which were significant at the .05 level; the number of previous admissions to corrections was correlated with a diagnosis of personality disorder or sexual deviation or not (.358), the number of previous admission to Oak Ridge (.447), and the number of previous admissions to psychiatric institutions, excluding Oak Ridge (.276). A diagnosis of personality disorder or sexual deviation was correlated with whether the patient was on medication at the time of conference or not (-.249), and the patient's current age (-.286). Whether the patient was on medication was related to the number of negative comments (.322). The number of previous admissions to Oak Ridge was related to the number of admissions to psychiatric facilities other than Oak Ridge (.262) and, finally, offense

severity was related to the number of months in Oak Ridge (.224). None of the predictive variables were intercorrelated highly enough to render the stepwise regression analysis difficult to interpret.

#### Regression Analyses

A stepwise regression analysis was used to predict each rater's dangerousness ratings from the 10 predictor variables. It is summarized in Table 3. The adjusted multiple R was .363, .438, .276, and .343 for raters 1 through 4, respectively. There were differences in the order with which the variables were entered into the regression analysis over raters but the sign of the regression coefficients did not vary greatly over raters; that is, the directional relationship between each independent variable and the criterion tended to be the same over raters. The first three raters agreed perfectly and the fourth rater reversed the signs of three regression coefficients.

After the data analyses were completed, raters 1, 3 and 4 (rater 2 had left the institution) were individually requested to rank order the 10 predictive variables in

TABLE 3  
STEPWISE REGRESSION ANALYSES  
FOR EACH RATER

Variable Number <sup>1</sup> and multiple R (in brackets) for each rater				
	A	B	Raters C	D
Step				
I	1(.291)P <sup>2</sup>	4(.363)P	10(.221)P	1(.338)P
II	2(.387)P	3(.451)N	6(.376)P	4(.376)P
III	3(.407)N	1(.471)P	3(.430)N	5(.421)P
IV	4(.421)P	2(.486)P	9(.454)N	8(.445)P
V	5(.437)P	8(.493)N	4(.466)P	9(.460)N
VI	6(.442)P	9(.497)N	5(.476)P	6(.475)P
VII	7(.448)N	10(.501)P	8(.479)N	3(.479)N
VIII	8(.452)N	7(.505)N	7(.480)N	10(.481)P
IX	9(.453)N	5(.510)P	1(.482)P	2(.485)N
X	10(.455)P	6(.513)P	2(.483)P	7(.488)P

<sup>1</sup> The variables are: (1) negative comments 1, (2) number of admissions to corrections, (3) unambiguous premeditation of current offense, (4) whether on medication at the time of conference, (5) whether diagnosed as personality disordered or sexual deviation, (6) rated offense severity, (7) number of previous admissions to Oak Ridge, (8) months in Oak Ridge, (9) age at time of conference, and (10) number of admissions to other psychiatric hospitals.

<sup>2</sup> P indicates that the variable was positively related to increasing degrees of perceived dangerousness (that is, had a negative regression weight) and N indicates the reverse.

terms of how important he thought they were in assessing the dangerousness of WLGs and to indicate in what direction he thought each variable was related to the dangerousness of WLGs. Although this was a highly artificial task and not strictly comparable to the rank ordering of the regression analysis (because the regression analysis takes into account the intercorrelation of the variables) it is of some interest since it is relevant to the issue of to what extent the clinicians use the variables which they think are important. A rank order correlation was computed between the regression ranking and each clinician's ranking of the 10 variables disregarding the sign or direction of each variable. None of the three correlations approached significance. Of the most important — i.e. first 3 — variables identified by the regression analysis, rater one ranked 2 of these variables in his top three, rater 3 ranked one and rater 4 ranked none. With respect to the direction in which the variables were related to dangerousness, rater one's description of

the directions agreed with the direction found in his regression analysis for 3 of the 10 variables and the directions specified by raters 3 and 4 agreed with their regression analyses for 5 of the 10 variables. In summary, there was no relationship between either the ranking or direction of the 10 variables between the two methods for any of the three raters. The rankings obtained in the interviews of the 3 clinicians were also intercorrelated, disregarding the sign of each variable. None of these correlations approached significance.

#### Discussion

Psychiatrists and other mental health professionals are frequently employed by society as experts in the prediction of dangerousness. Although many mental health professionals are reluctant to fulfill this role, it remains one of their most important functions and, as we have pointed out elsewhere (Quinsey, Pruesse & Ambtman, Note 1) someone has to make predictions regarding the dangerousness of institutionalized mental patients. It would seem reasonable to suppose that expertise in any field would be defined by (a) the experts exhibiting high inter-rater and intra-rater agreement in their judgments, assuming that they have access to the same data, (b) that they would weight and combine data used to form their judgments in similar ways, (c) that their judgments would be different and more accurate than non-experts and, finally, (d) that their judgments be valid or accurate. It should be clear, that among experienced clinicians, expertise or the ability to render expert judgments is primarily determined by the state of the art rather than by their knowledge of the field.

The present study has presented data relevant to criteria *a*, *b*, and *d*, listed above. The average inter-clinician correlation for the dangerousness ratings was .60, indicating that there was 36% of shared variance in the judgments among pairs of raters. The first criterion of high interrater congruence does not, therefore, appear to have been met. The stepwise regression analyses indicate that the raters did not order the variables in terms of importance in similar ways, although they did agree, in most



cases, as to the direction in which the variable was related to dangerousness. Further, when three of the clinicians were individually asked about which variables were most important and in what direction these variables were related to dangerousness, they neither agreed with each other nor with the regression analyses of their rating data. Thus the criterion of similar weighting strategies does not appear to have been met. The data of the present study also speak indirectly to the issue of the validity of accuracy of the judgments because reliability sets limits to validity. Since the highest correlation for the dangerousness ratings among pairs of raters was .67, only 1 rater could have achieved a validity coefficient much above this value.

In the prediction of dangerousness, there is an important distinction which can be made between static and dynamic predictor variables. Static predictors of dangerousness are those which cannot change or are unlikely to change during the course of hospitalization, such as a patient's offense history. Dynamic predictor variables are those which reflect patient change during the course of his hospitalization such as his age, current psychiatric symptomatology, and progress in treatment. To the extent that psychiatric determinations of dangerousness reflect static variables the behavior or condition of the patient during hospitalization is irrelevant to his release. In the first study we observed that, of the variables significantly associated with decisions to release, two reflected the patients' in-hospital behavior and one (unambiguous premeditation) was a static variable. In the second study, it can be seen in Table 3 that the multiple R's for the four raters did not increase markedly after the third step. Of the first three variables, 2 were dynamic and 1 was static for 2 of the raters, 2 were static and 1 was dynamic for another, and 3 were static for the remaining rater. It appears, therefore, at least for 3 of the raters, that a mix of dynamic and static variables are used in determinations of dangerousness. Because, however, at least 75% of the variance of the dangerousness ratings was unaccounted for it is impossible to determine how much influence the patients' in-hospital behaviors had.

The two historical events which the WLGs share is that they have all committed a criminal offense and have all been found mentally ill. It is of some interest, therefore, to note: first, that in the eyes of the raters, mental illness and dangerousness are positively associated, a finding which replicates an earlier conference study (Quinsey, 1975), and secondly, that there was little relationship between offense severity and ratings of dangerousness. Offense severity was not significantly related to the conference decision in Study 1 and was not among the three most important variables related to dangerousness ratings for three of the four raters in Study 2. The lack of association between offense severity and dangerousness ratings may well be because the large majority of WLGs had committed very serious offenses.

A major limitation of this study is that the predictions of perceived dangerousness were made from variables that were taken from the patients' files and not necessarily from the information that was actually used in the conference assessment. The relationships obtained, therefore, are undoubtedly conservative and, in addition, as in any correlational study, the relationships may be caused by the correlation between the predictor variable and another variable which was highly related to the dependent variable but which was not included in the study. An experimental study currently underway circumvents this problem, at the cost of using a contrived assessment situation, by varying and controlling the types of information used by psychiatrists in determining patient dangerousness.

#### REFERENCES

- AKMAN, D. D., and NORMANDEAU, A. (1967). The measurement of crime and delinquency in Canada: a replication study. *British Journal of Criminology*, 7, 129-149.
- ARNOLD, L. S., QUINSEY, V. L., and VELNER, I. (1977). Overcontrolled hostility among men found not guilty by reason of insanity. *Canadian Journal of Behavioural Science*, 9, 333-340.
- DIX, G. E. (1975). Determining the continued dangerousness of psychologically abnormal sex offenders. *Journal of Psychiatry and Law*, 3, 327-344.



KAHNEMAN, D., and TVERSKY, A. (1973). On the psychology of prediction. *Psychological Review*, 80, 237-251.

PRUESSE, M., and QUINSEY, V. L. (In press) The dangerousness of patients released from maximum security: a replication. *Psychiatry and Law*.

QUINSEY, V. L. (1975). Psychiatric staff conference of dangerous mentally disordered offenders. *Canadian Journal of Behavioural Science*, 7, 60-69.

QUINSEY, V. L., and BOYD, B. A. (1977). An assessment of the characteristics and dangerousness of patients held on Warrants of the Lieutenant Governor. *Crime and Justice*, 4, 268-274.

QUINSEY, V. L., PRUESSE, M., and FERNLEY, R. (1975). A follow-up of patients found not guilty by reason of insanity or unfit for trial. *Canadian Psychiatric Association Journal*, 20, 461-467, (a).

QUINSEY, V. L., PRUESSE, M., and FERNLEY, R. (1975). Oak Ridge patients: prerelease characteristics and post-release adjustment. *Psychiatry and Law*, 3, 63-77, (b).

STEADMAN, H. J., and COCOZZA, J. J. (1973). The criminally insane patient: who gets out? *Social Psychiatry*, 8, 230-238.

STURUP, G. K. (1968). Will this man be dangerous? In A. DeReuck, & R. Porter (Eds.) *The mentally abnormal offender*. London: Churchill.

TONG, J. E., and MacKAY, G. W. (1959). A statistical follow-up of mental defectives of dangerous or violent propensities. *British Journal of Delinquency*, 9, 276-284.

WALLER, I. (1974). *Men released from prison*. Toronto: University of Toronto Press.

## RÉSUMÉ

L'évaluation psychiatrique de la dangerosité des criminels malades mentaux:

Cent cinq hommes trouvés non coupables pour raison de maladie mentale ou encore incapables de subir un procès furent considérés pour leur élargissement d'une institution à sécurité maximale par l'équipe de conférence de cas d'un hôpital. L'équipe recommanda que 64 patients soient retenus et que 30 autres soient transférés dans un établissement à sécurité moindre. Les patients qui avaient démontré une préméditation non ambiguë au moment de commettre le crime, qui avaient reçu peu de rapports disciplinaires négatifs ou de rapports indiquant un mauvais état psychiatrique, et qui ne recevaient pas de médicaments psychotropes au moment de la conférence étaient plus susceptibles que les autres de recevoir une recommandation de transfert. Quatre cliniciens évaluaient individuellement les caractéristiques des patients pour lesquels ils participaient à une conférence. Des analyses de régressions multiples en quatre étapes produirent un R multiple de .48, de moyenne entre les cliniciens, entre l'évaluation de la dangerosité des patients et les 10 variables concernant les caractéristiques des patients. La corrélation moyenne inter-cliniciens des évaluations de la dangerosité des patients était de .60, indiquant un accord modeste entre les évaluations.